Application No. 09/842,801

Reply to Office Action of April 24, 2009

IN THE CLAIMS

Please amend the claims as follows:

1-16. (Canceled).

17. (Currently Amended) A redundant routing system including a processor, the

system comprising:

a first routing unit configured to manage input data and output data;

a second routing unit configured to manage said input data and said output data;

a network interface configured to connect said first and second routing units; and

a standby bus interface configured to connect said first and second routing units to

each other, wherein,

when said first routing unit is managing said input data and said output data, said

second routing unit is configured to detect detects a failure of said first routing unit by

monitoring both [[said]] the network and the standby bus interfaces using messages sent over

both the network and the standby bus interfaces,

when said second routing unit detects [[a]] said failure of said first routing unit, said

second routing unit is configured to deactivate activates a reset algorithm stored in said first

routing unit so that said first routing unit no longer manages said input data and said output

data and said second routing unit is further configured to start starts managing said input data

and said output data, and

a memory address of the reset algorithm stored in said first routing unit is stored in a

set [[sets]] of parameters for interpreting the messages, including configuration parameters of

an application configured to run on at least one of the first and second routing units, are

configured to be stored in at least one configuration file included in [[both]] said first and

second routing unit units, and when said first routing unit detects a failure in itself, said first

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routing unit is configured to deactivate itself to cease managing said input and output data and to allow said second routing unit to start managing said input and output data.

- 18. (Previously Presented) The system of claim 17, wherein said first and second routing units have identical functions and include identical software and configuration files.
- 19. (Currently Amended) The system of claim 17, further comprising: at least one serial link connecting said first and second routing units to at least one other system.
- 20. (Previously Presented) The system of claim 19, wherein said at least one serial link comprises at least one Y-split cable.
 - 21. (Canceled).
- 22. (Previously Presented) The system of claim 17, wherein said first routing unit is configured to deactivate itself and to activate said second routing unit by a change in an impedance of at least one input/output serial port.
- 23. (Previously Presented) The system of claim 22, wherein the change in impedance imparts putting said at least one input/output serial port in a high impedance state.
- 24. (Currently Amended) The system of claim 17, wherein said second routing unit is configured to deactivate said first routing unit by sending a reset command to said first

routing unit via the standby bus interface, said reset command executing [[a]] the reset algorithm on said first routing unit.

- 25. (Currently Amended) The system of claim 17, wherein the messages are polling messages that are exchanged via [[said]] the network and the standby bus interfaces, said polling messages carrying information relevant to detecting said failure.
- 26. (Currently Amended) The system of claim 25, wherein said second routing unit is configured to detect said failure of said first routing unit when said polling messages are not properly responded to on at least one of [[said]] the network and the standby bus interfaces.
 - 27. (Canceled).
- 28. (Currently Amended) The system of claim 17, wherein, when launching [[the]] an application on said first and second routing units, the [[sets]] set of parameters, which includes configuration parameters of said application, is [[are]] loaded into a random access memory (RAM).
- 29. (Previously Presented) The system of claim 17, wherein said network interface is configured to link said first and second routing units with at least one remote client system.
- 30. (Previously Presented) The system of claim 17, wherein said network interface is the Internet.

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31. (Previously Presented) The system of claim 17, wherein said network interface is

an Ethernet network.

32. (Previously Presented) The system of claim 17, wherein said network interface is

a digital local area network (LAN).

33. (Currently Amended) The system of claim 17, wherein said first and second

routing units are configured to operate in Open Communication Processor (OCP) mode.

34. (Currently Amended) The system of claim 17, further comprising:

an alert protocol to warn of a possible said failure of the system.

35. (Previously Presented) The system of claim 17, wherein said first and second

routing units are data routers.

36. (Previously Presented) The system of claim 17, wherein said first and second

routing units are data servers.

37. (Currently Amended) The system of claim 18, wherein, after said second routing

unit is activated and starts managing said input data and said output data, said first routing

unit is configured to detect detects a failure of said second routing unit.

38. (Canceled).

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39. (Currently Amended) A redundant routing system including a processor, the system comprising:

first routing means for managing input data and output data;
second routing means for managing said input data and said output data;
networking means for connecting said first and second routing means; and
connecting means for connecting said first and second routing means to each other,
wherein,

when said first routing means manages said input <u>data</u> and <u>said</u> output data, said second routing means detects a failure of said first routing means using both said networking and <u>the</u> connecting means by using messages sent over both [[the]] <u>said</u> networking and connecting means, [[and]]

when said second routing means detects [[a]] <u>said</u> failure of said first routing means, said second routing means <u>deactivates</u> <u>activates</u> a <u>means for resetting said first routing means</u> <u>stored in</u> said first routing means so that said first routing means no longer manages said input <u>data</u> and <u>said</u> output data and said second routing means starts managing said input <u>data</u> and said output data, <u>and</u>

said first and second routing means each include includes configuration means, [[for]] storing a set [[sets]] of parameters including a memory address of the means for resetting stored in said routing means for interpreting the messages, the sets of parameters including configuration parameters of an application configured to run on at least one of the first and second routing means, and when said first routing means detects a failure in itself, said first routing means deactivates itself to cease managing said input and output data, and allows said second routing means to start managing said input and output data.

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40. (Currently Amended) The system of claim 39, further comprising:

linking means [[or]] <u>for</u> connecting said first and second routing means to at least one other system.

- 41. (Canceled).
- 42. (Currently Amended) The system of claim 39, further comprising:

polling means for exchanging the messages, which are being polling messages, via said networking and connecting means, said polling messages carrying information relevant to detecting said failure.

43. (Currently Amended) The redundant routing system of Claim 17, wherein the at least one configuration file further includes:

the messages themselves;

at least one transmission interval between the messages; and

at least one time limit between two of the messages.

44. (Currently Amended) The redundant routing system of Claim 39, wherein each the configuration means further includes:

the messages themselves;

at least one transmission interval between the messages; and

at least one time limit between two of the messages.

45-46. (Canceled).

47. (New) A computer-readable medium encoded with computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to: receive messages from at least one of a network and a standby bus to detect a failure of a routing unit;

store a memory address of a reset algorithm stored in the routing unit;
activate the reset algorithm stored in the routing unit when the processor detects the failure of the routing unit;

receive input data over a link, after the processor activates the reset algorithm in the routing unit; and

transmit output data to the network, after the processor receives the input data.

48. (New) The computer-readable medium of claim 47, wherein the instructions further cause the processor to:

change a state of a port from a high-impedance state to receive the input data, when the processor detects the failure of the routing unit.

- 49. (New) The computer-readable medium of claim 47, wherein the link is a serial link.
- 50. (New) The computer-readable medium of claim 47, wherein the instructions further cause the processor to:

send a reset command over the standby bus to activate the reset algorithm, when the processor detects the failure of the routing unit.